ABSTRACT OF THE DISCLOSURE

A route candidate design unit 31 designs route candidates among nodes, and assigns available bands for the individual route candidates. The route candidate design unit 31 also arrays the individual route candidates in the order of priorities. A primary accommodation design unit 33 tries accommodation of a demand in a route candidate of a first priority. Where the route candidate of the first priority has a sufficient space band, the primary accommodation design unit 33 ends the design by accommodating the demand in the first priority route candidate. Where the space band is not sufficient, a secondary accommodation design unit 34 tries to accommodate the demand in a route of a second priority.